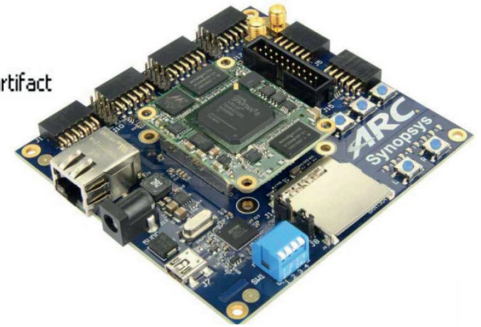
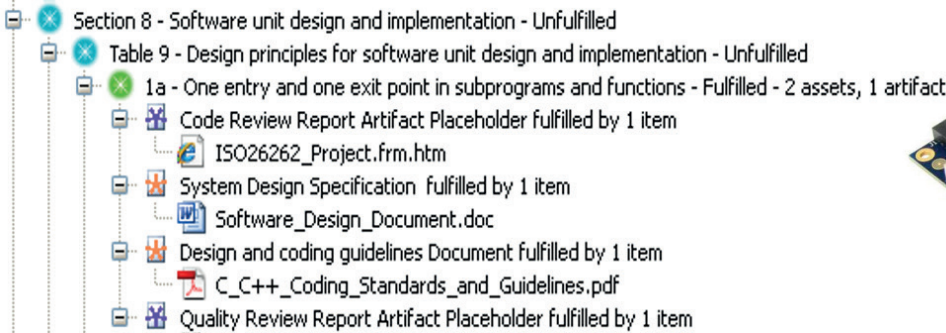


## LDRA tool suite® and Synopsys ARC® integration

LDRA has partnered with Synopsys to deliver a test and validation lifecycle solution for developers using Synopsys DesignWare® ARC® Functional Safety Processor IP. The LDRA tool suite together with the Synopsys DesignWare ARC MetaWare Development Toolkit for Safety enables source code static and dynamic analysis, improves code quality, safety, and security, and reduces testing costs.



Test Case View			Variable I/O View				
Test Case	Regression P / F	Procedure	Value	Name	Type	Use	Regression Analysis
1	PASS	integer_to_ascii	123	value	u32	Input parameter applied through local	Assigned
2	PASS	integer_to_ascii	5	digits	u8	Input parameter applied through local	Assigned
3	PASS	integer_to_ascii	0	blanks	u8	Input parameter applied through local	Assigned
4	PASS	integer_to_ascii	'0'	itoa_str[0]	s8	Output global	Compare + Write
5	PASS	integer_to_ascii	'0'	itoa_str[1]	s8	Output global	Compare + Write
6	PASS	integer_to_ascii	'1'	itoa_str[2]	s8	Output global	Compare + Write
7	PASS	integer_to_ascii	'2'	itoa_str[3]	s8	Output global	Compare + Write
8	PASS	integer_to_ascii	'3'	itoa_str[4]	s8	Output global	Compare + Write
9	PASS	integer_to_ascii	'0'	itoa_str[5]	s8	Output global	Compare + Write
			'0'	itoa_str[6]	s8	Output global	Compare + Write
			0	itoa_str[7]	s8	Output global	Compare + Write

### Benefits

- Synopsys DesignWare ARC functional safety (FS) processor IP supports ASIL B through ASIL D safety levels, simplifying safety-critical automotive SoC development and accelerating ISO 26262 qualification.
- Synopsys DesignWare ARC MetaWare Development Toolkit for Safety accelerates the development of ISO 26262-compliant code.
- LDRA's tool suite complements the Toolkit in achieving standards compliance, and assurance towards meeting functional safety and security goals, while also enabling requirements traceability.
- LDRA's Target License Package for the Toolkit provides a seamless interface for developers of Synopsys ARC processor-based SoCs, enabling them to deliver well-constructed, documented and tested software, and benefit from significant time, cost and operational savings.

### Solution Details

- supports the Synopsys DesignWare ARC MetaWare Development Toolkit for Safety, providing source code static and dynamic analysis
- supports the Synopsys ARC EM FS and HS FS family of functional safety processors for unit testing and coverage analysis
- compliance with coding standards (industry- and user-defined) such as MISRA and CERT
- automated test case, harness, and stub generation for robustness testing with the LDRA tool suite
- exposes high-risk areas and defects via auto code analysis and report generation
- automatically produces software certification and approval evidence
- is underpinned by LDRA's ISO 9001:2015 certified Quality Management System, and the LDRA tool suite's TÜV SÜD and SGS-TÜV Saar certification



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